

DGMS

Jamaica and Cogeneration

AMCHAM

private sector forum on energy

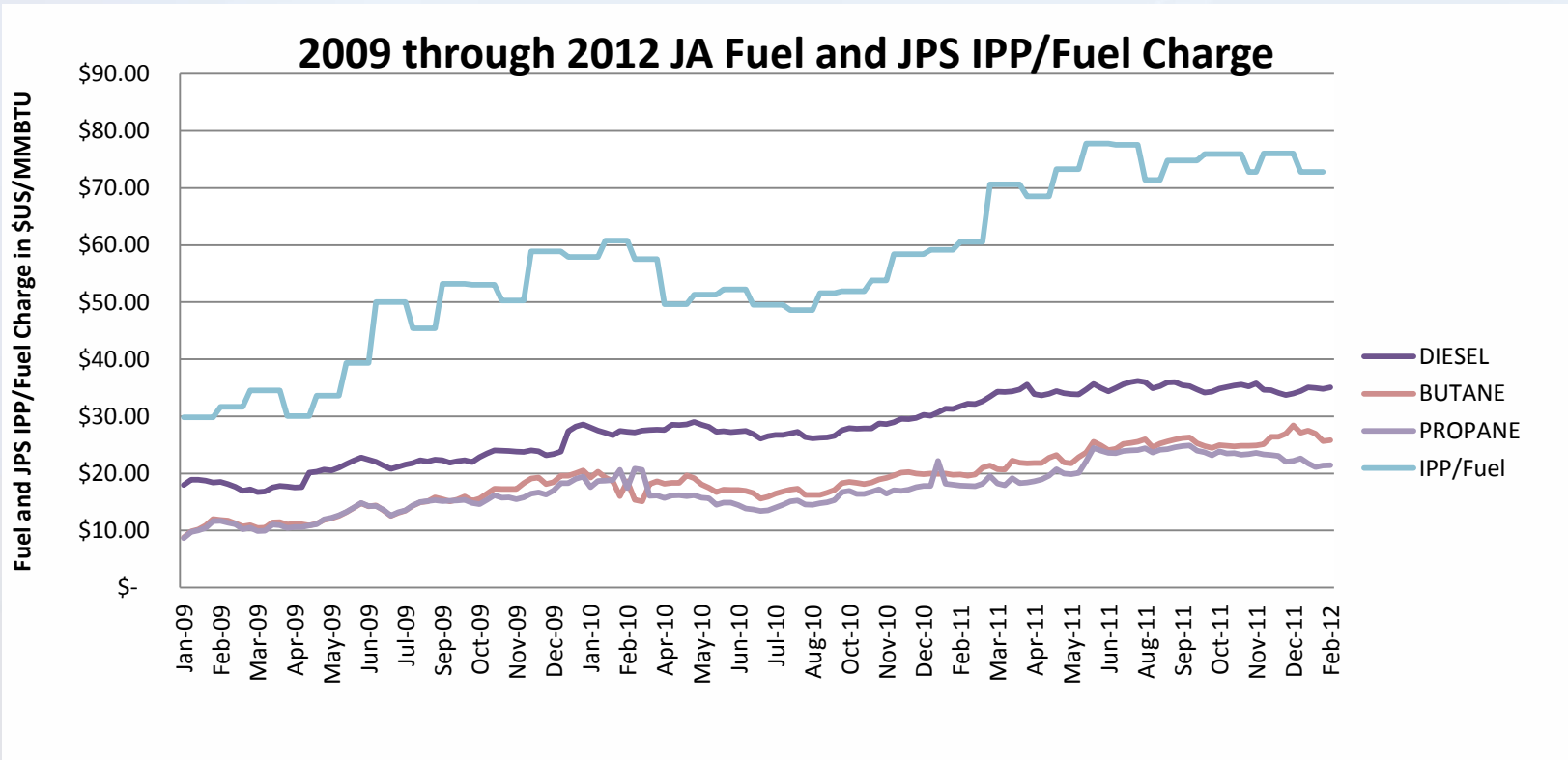
William K Clark



- Energy Costs in Jamaica
- Define high efficiency generation systems?
- Identifying the **right** applications
- Keys to a **successful** project
- Economic Modeling
- Bill's **5 Step Plan** to lowering costs

Energy Costs in JA

- There has been a dramatic Increase in cost of electricity
- The cost of electricity has increased at a faster rate than that of fuel

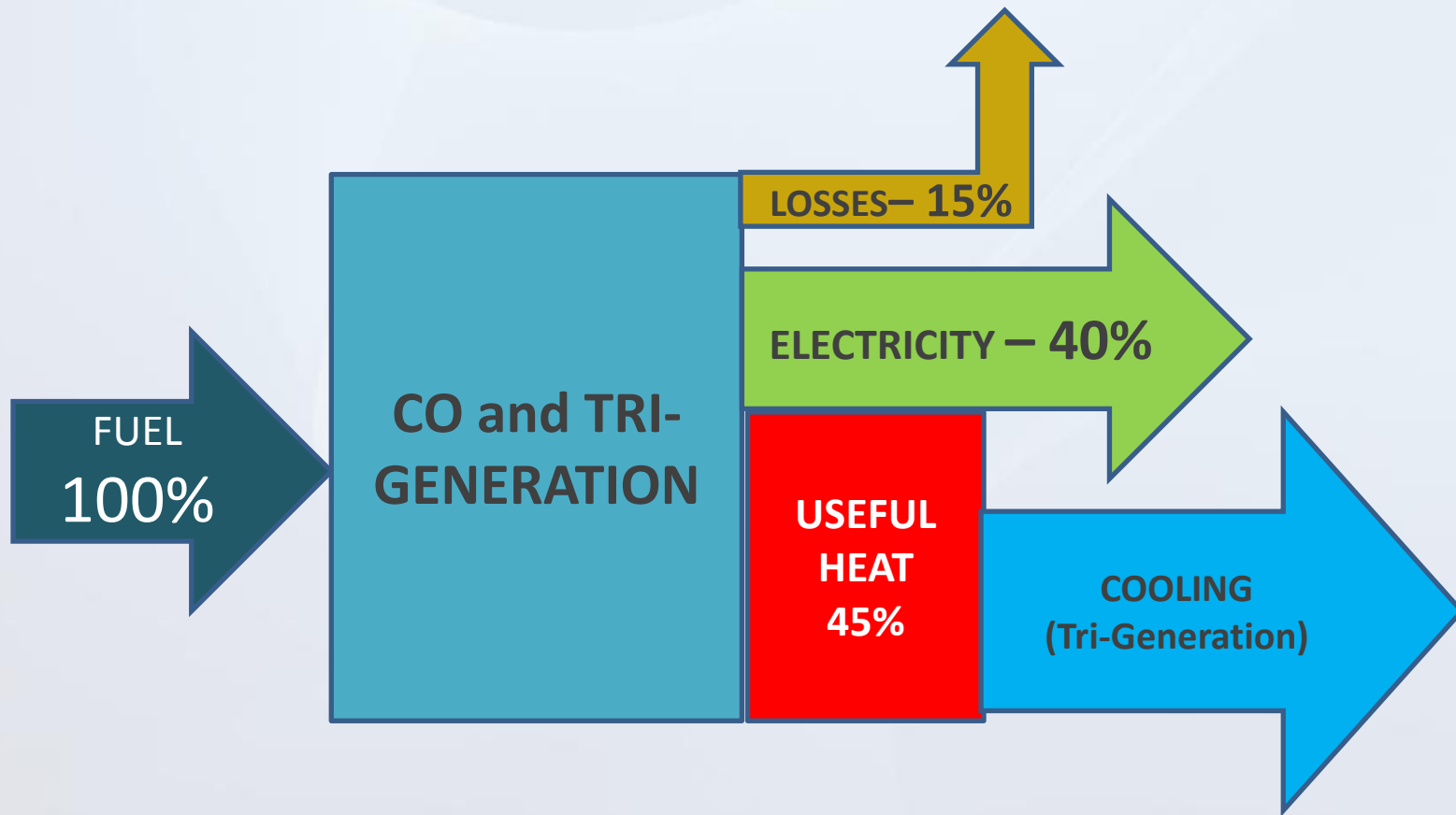


Jamaican Energy facts



- **The IPP/Fuel Charge is 60-70% of the JPS cost**
 - Demand is 10% or less
- A/C is typically 50-60% of the energy use (Hotels & Office)
- Solar and Wind power does not **replace** the need for base load energy production.
- LPG is lower cost (per energy unit) than other readily available fuels in JA
- LNG will come to Jamaica

What is Cogeneration



The Right Application for Co-generation

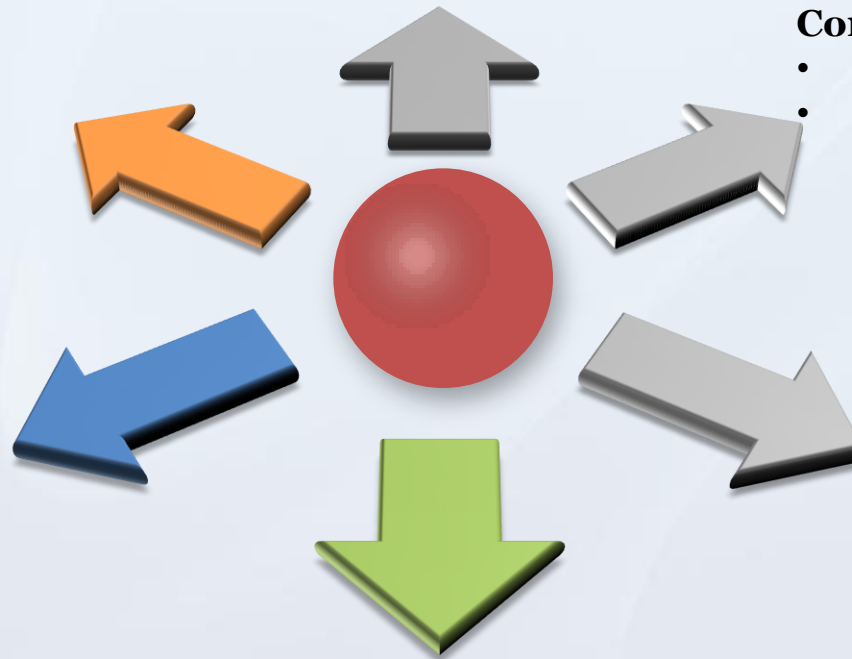


Good Overall Power Factor

24/7 Operation

Constant Thermal usage

- **Steam & hot water**
- **A/C (chilled water)**



**Constant
Electrical usage**

**Understanding
facility energy
consumption
behavior**

**Energy costs are
greater than JA\$15
mil/month**

Keys to successful energy projects



- Know your Usage Profile
 - Electric
 - Thermal
- Manage your Energy Usage
 - Energy Management System
 - Flatten your Usage
- Integration of Energy Production Systems
- **“Future Proof”** the Investment
- Skilled O&M

The Golden Rule



Efficient Energy Supply
is dependent upon
Efficient Energy Usage!

**It is much less expensive to save
a KW than it is to produce a KW!**

- Installed Capital Costs
 - J\$100M to J\$150M/MW
- Investment can be phased in
 - Thermal
 - Use of existing systems
 - Full Cogeneration or Tri-generation systems

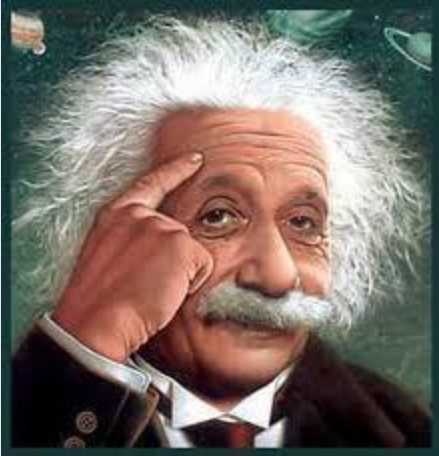
**Payback is typically three
years or less!**

5 step plan



- Step 1** Know how you use the energy you purchase
- Step 2** Lower consumption whenever possible
- Step 3** Look to the future
- Step 4** Invest in high efficiency energy systems
- Step 5** Maintain and Service the systems

Albert Einstein



**"In the middle of difficulty
lies opportunity."**

**"We can't solve problems by using the same kind of
thinking we used when we created them."**

**"A man should look for what is, and not for
what he thinks should be."**

THANK YOU FOR YOUR TIME

Questions?



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